

## **FAA R&D Field Offices Located at NASA Centers Memorandum of Agreement (MOA)**

---

**MEMORANDUM OF AGREEMENT**  
between the  
**FEDERAL AVIATION ADMINISTRATION**  
and the  
**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**  
concerning  
**SUPPORT OF FAA R&D FIELD OFFICES**  
at  
**NASA RESEARCH CENTERS**

### **I. PURPOSE**

This Memorandum of Agreement (MOA) provides for the continued operation and support of the Federal Aviation Administration's (FAA) Research & Development (R&D) Field Offices, AAR-210 and AAR-220, established at the National Aeronautics and Space Administration's (NASA) Langley and Ames Research Centers, respectively. The Field Offices support the coordination and collaboration of FAA activities with NASA. Charter for the Field Offices is set forth in the FAA/NASA Memorandum of Understanding (MOU) for Program Support. This MOA updates and replaces MOA FNA/05-92-01, extending the duration of Field Office operations at NASA Centers.

### **II. BACKGROUND**

FAA Field Offices were established at NASA in 1971 to provide the means for conducting research of interest to the FAA that required the use of specialized facilities available at NASA Centers. It was mutually recognized that NASA operates unique national research facilities at its Ames, Langley, Lewis, and Dryden Flight Research Centers that can provide considerable resources and expertise unavailable within the FAA. Congress noted that the shared use of resources and facilities would achieve substantial economies and promote efficiency in the continuing research and development activities of each agency by not requiring duplication of costly facilities, equipment, and other resources.

Since their inception, the scope of the Field Offices has been further expanded to provide: (1) technical and administrative coordination and support for numerous collaborative and cooperative research projects conducted at the NASA Centers, (2) the means for participation in and conduct of both joint and individual agency research activities, and (3) the means to identify and facilitate the

transfer of significant NASA research and technology to support FAA requirements and the operational needs of the National Airspace System (NAS). The Field Office at Langley also supports coordination of FAA activities at Lewis Research Center and the office at Ames supports coordination of FAA activities at Dryden Flight Research Center.

Over the years, the Field Offices have been able, through their coordination efforts, to facilitate the accomplishment of a significant number of research activities that have benefited FAA. In addition, the Field Offices have participated in and conducted specified FAA research and developmental projects using NASA facilities and resources. The offices work closely with NASA personnel on cooperative projects, interacting in several modes to support FAA needs: (1) by participating in research projects jointly with NASA researchers; (2) by assisting NASA in working with appropriate FAA personnel to develop and deploy NASA-sponsored NAS technologies; (3) by directly contributing resources and support to established NASA research projects on behalf of the FAA; and (4) in cases where there are no established NASA research programs pertaining to the effort needed, perform as principal investigator, as mutually agreed with NASA, on FAA research utilizing unique NASA facilities and other NASA resources. Participation by Field Office and off-site FAA personnel will vary from general monitoring of research being conducted at the NASA Centers to active involvement in jointly conducted or individual research programs and experiments, depending upon the nature of the research and the expertise of the office staff and other assigned personnel.

The major areas of FAA/NASA cooperative and collaborative research are outlined and described in seven Memoranda of Understanding (MOUs) established between the agencies and formalized by the Administrators. Specific research activities or programs are performed under the auspices of various MOAs, which specify the responsibilities and resource allocation of each agency for the activity undertaken. MOAs specify the cooperative activities under the sanction of one or more of the seven MOUs. MOAs are negotiated and written by personnel from both agencies, who are responsible for the specific research program or activity. Once the statement of work has been negotiated and specified in the MOA, funding transfers, if specified in the agreement, are transferred between agencies through the appropriate procurement policies and practices of each agency's contracting office. The MOU/MOA process is used by both agencies to formalize responsibilities and commitments between agencies, to track programs through the system, and to advocate and show cooperation of activities to Congress and other government entities.

### **III. OBJECTIVE/SCOPE**

This MOA reaffirms the mutual intent of both agencies to continue the activities of FAA Field Offices located at the NASA Research Centers operating in the manner set forth as described above.

Use of this Agreement for support of activities other than Field Office operations will generally be limited to accomplishment of cooperative projects that do not warrant creation of a separate MOA or which require prompt action to accomplish agreed upon objectives. These would include:

(1) initiation of tasks requiring immediate action for which a separate MOA will be written as soon as possible thereafter to formalize the cooperative relationship, (2) Congressionally mandated tasks

that require immediate action, and (3) other activities that must be conducted on a rapid turn-around basis in order to be responsive to FAA operational concerns and flight safety issues. Also included are activities that cut across research disciplines, e.g. cooperative activities using established FAA Centers of Excellence (COE) or other similar enterprise. Where this support involves reimbursables, transfer of funds between the FAA and NASA will be governed by appropriate procedures and policies as set forth in both federal acquisition and individual agency regulations, incorporating FAA and NASA accounting and appropriation codes. Documentation for transfer of funds, approved through this or any other MOA, shall reference the appropriate MOA for the cooperative activity being funded. Approval for the cooperative activities and projects will follow established FAA and NASA procedures.

#### **IV. STATEMENT OF WORK**

Maintenance of the FAA Field Offices and the research conducted under the auspices thereof at the NASA Centers shall be governed by the following provisions.

##### **A. Tasks**

##### **1. Field Office Operation Provisos**

##### **a) The FAA shall:**

- (1)** Assign FAA personnel to duty stations at the Ames and Langley Research Centers for the purpose of supporting, directing, conducting, and managing research and development projects of interest to the FAA; such personnel to be subject, while at such duty stations, to rules and regulations as may be in force at the cognizant research center, for the health, safety, security, and welfare of persons or property.
- (2)** Designate a "Field Office Manager" at each of the Ames and Langley Research Centers with authority over selection, priority, and scheduling of FAA programs at the Centers.
- (3)** Retain the complete responsibility for personnel actions for FAA employees assigned under this Agreement, including classification, performance evaluation, promotions, and pay. Travel and transportation costs of FAA employees and dependents to and from duty station and for other official FAA requirements will be borne by the FAA.
- (4)** Provide funding for day to day office operations in support of managing activities undertaken pertaining to the maintenance of this agreement. This includes funding for travel and administrative

expenses for FAA representatives and employees. In addition, provide funding to be disbursed to NASA, in a manner mutually agreed by the Field Office Manager and appropriate NASA representatives, in consideration for NASA support of field office operations.

- (5) Provide, through the Field Offices, the primary technical FAA liaison between the NASA Research Centers and the appropriate FAA user functions and other support as appropriate to facilitate the technology transfer for cooperative and relevant NASA R&D programs.
- (6) The Field Office Manager shall function as the FAA authorized representative for all matters pertaining to or arising under this Agreement.

b) The NASA shall:

- (1) Make available to the FAA adequate office space to house FAA civil servant and support personnel assigned to the NASA Research Centers pursuant to this Agreement, together with reasonable equipment, services, and supplies.
- (2) Provide procurement, logistic, travel arrangements, and other services which may, from time to time, be requested of the NASA Research Centers on behalf of the FAA and mutually agreed upon by the authorized representatives.

2. Interagency Operational Provisos

Both parties agree:

- (1) That the Ames Field Office will be responsible for supporting the coordination and conduct of FAA/NASA cooperative research activities performed at the NASA Dryden Flight Research Center. The Langley Field Office will be responsible for supporting the coordination and conduct of FAA/NASA cooperative research activities performed at the NASA Lewis Research Center. Both offices will further support FAA/NASA cooperative research activities associated with other FAA and NASA facilities in their area of concern.
- (2) That FAA and NASA authorized representatives shall meet, as appropriate, to accomplish budgetary planning and scheduling, to

review research projects which have been or are to be undertaken under the auspices of this Agreement, and to review the adequacy of the provisions of this Agreement. Such meetings will review the nature and scope of projects, NASA facilities and supporting overhead, schedules, and the estimated costs.

- (3) That NASA will make available, for use by the FAA, certain research facilities and related supporting services, as identified and decided upon by mutual agreement of the authorized representatives having cognizance of the particular facility. That such research facilities will be scheduled by the cognizant NASA Research Center with due consideration to FAA defined project priorities.
- (4) That joint funding will be provided for expanded usage or expanded capabilities of research facilities where these expansions are the result of common FAA/NASA requirements or programs. Mutually funded alterations or additions to NASA research facilities will become NASA property. Disposition of other equipment or materials jointly funded will be determined by the Technical Representatives (see Section V, Technical Representatives) in compliance with appropriate FAA and NASA policies.
- (5) That FAA will provide funding for expanded usage or expanded capabilities of research facilities where these expansions are the result of unique FAA requirements or programs. Upon completion of the requirements or program, alterations or additions to NASA research facilities become the final property of NASA. Other equipment or materials funded or supplied by FAA as a result of these requirements or programs shall become the property of the FAA and disposed of as determined by the Technical Representatives (see Section V, Technical Representatives) in compliance with appropriate FAA policies.
- (6) That work or services, materials, supplies, or equipment not otherwise covered under provisions of this Agreement shall, when furnished by one party to the other, be furnished normally on a nonreimbursable basis; however, contract costs for work or services, materials, supplies, or equipment when procurement thereof is undertaken by one party at the request of the other shall be reimbursed by the party requesting the procurement.
- (7) That in the event NASA facilities are deactivated or become otherwise unusable, such condition precluding the ability to conduct research as specified under this agreement, then the parties to this agreement are

excused of all obligations in performing their duties under this agreement for as long as the facilities are unusable.

- (8) That FAA and NASA will provide each other access to all data generated and copies of all technical reports resulting from research and development activities conducted by the FAA and NASA as a result of this Agreement.

3. FAA Centers of Excellence (COE) Provisos

- a) Both parties agree:

NASA sponsored research activities involving the FAA Centers of Excellence, conducted under the auspices of this MOA, shall be coordinated with the appropriate FAA Headquarters and/or William J. Hughes Technical Center COE representatives. Since the NASA sponsored research being performed through the FAA COE program will support and complement ongoing and planned research of interest to the FAA, the FAA may elect to waive the usual overhead fee when receiving reimbursable funds from NASA for COE tasks.

- b) Additionally, the Ames and Langley Field Offices will:

- (1) Assist FAA Headquarters and William J. Hughes Technical Center COE technical representatives in coordinating and facilitating the administrative and technical aspects of this collaborative activity, including the transfer of NASA funds to the cognizant parties at the COE.
- (2) Assist FAA COE technical representatives in developing appropriate documentation for internal reporting and record keeping.
- (3) Track and maintain records of all NASA funding transfers to the FAA COE.
- (4) Facilitate open communications between the NASA, FAA COE technical representatives, the COE, and other involved parties.
- (5) Coordinate FAA and NASA meetings to review work undertaken by the COE on behalf of NASA and other meetings as required in the performance of this Agreement.

- c) In order to support the FAA in the administration of the COE in the above tasks, NASA will:

- (1) Prepare detailed statements of work outlining the requirements to be undertaken by the COE.
- (2) Prepare the necessary documents to facilitate the transfer of funds to the FAA in amounts sufficient to perform the tasks outlined in the statement of work.
- (3) Acknowledge that an amount equal to or greater than ten percent (10%) of the total funds transferred will be allocated as a grant in the performance of the COE activity as specified under the FAA indefinite delivery, indefinite quantity (IDIQ) contract associated with the COE.

#### **B. Personnel**

In addition to permanently assigned personnel (see Section IV. Statement of Work, Part A. Tasks) the Field Offices will facilitate and help coordinate any temporary (less than one year) or long-term (greater than one year) exchange or assignment of personnel from FAA to NASA and NASA to FAA for participation in and support of FAA/NASA cooperative activities. FAA civil servants and contractors assigned to NASA, will be supported by the Field Offices, as appropriate, with office space and other services as provided by NASA (see Section IV. Statement of Work, Part A. Tasks).

#### **C. Funding**

Funding will be provided to the NASA in a manner mutually agreed to by both parties in consideration for support of the field offices at the Ames and Langley Research Centers, as set forth in the above paragraphs. Additionally, this agreement may also be used as authorization for the transfer of funds between the FAA and NASA on a task-by-task basis to cover the cost of specific cooperative projects that do not warrant individual MOAs or for activities that must be completed on a rapid turn around basis. This can include activities that cut across several research disciplines for which a separate MOA may not be appropriate (see Section III. Objective/ Scope). In these instances, the cooperative activity or task will be coordinated with the cognizant FAA and NASA officials. The responsibility for budgeting and defending fiscal resources will remain with the individual agency.

This MOA will not be used by itself as a funding document for the purpose of recording NASA and/or FAA transfer of funds. The transfer of funds documentation will, however, refer to this MOA as the basis for the transfer.

Upon MOA termination, FAA and/or NASA will refund any portion of funds to the other party that has been advanced, but not expended.

## **V. TECHNICAL REPRESENTATIVES**

The individuals listed below are responsible for the oversight of this MOA at their respective Centers: however, they do not have the authority to unilaterally alter any of the terms of the MOA. Any requests for changes must be made in accordance with Section VIII of this document, Amendments or Modifications. The office of record for this MOA is the FAA/NASA R&D Field Office at NASA, Langley Research Center, Hampton, Virginia.

1. Hugh P. Bergeron, Manager, FAA R&D Field Office (AAR-210), Mail Stop 250, NASA Langley Research Center, Hampton, Virginia, Phone: (757) 864-1905, Fax: (757) 864-1908, E-mail: h.p.bergeron@LaRC.NASA.GOV
2. Dr. Darrel R. Tenney, Director, Airframe Systems Program, Mail Stop 113, NASA Langley Research Center, Hampton, Virginia, Phone: (757) 864-6033, E-Mail: d.r.tenney@LaRC.NASA.GOV
3. Barry C. Scott, Manager, FAA R&D Field Office (AAR-220), PO Box 25, NASA Ames Research Center, Moffett Field, California, Phone: (415) 604-6379, Fax: (415) 604-0173, E-mail: bscott@mail.arc.nasa.gov
4. John W. Boyd, Executive Assistant to Director, Mail Stop 200-1, NASA Ames Research Center, Moffett Field, California, Phone: (415) 604-5222, E-Mail: jboyd@mail.arc.nasa.gov

## **VI. PERIOD OF AGREEMENT**

This Agreement shall become effective upon the date of signature by the last party bearing witness to its provisions and shall remain effective for a period of five years, after which it may be further extended if agreed to by both parties. Either party may terminate this MOA one year after written notification of intent to terminate.

## **VII. DISSEMINATION OF INFORMATION**

Data generated under this MOA will be considered in the public domain. NASA and/or the FAA may disclose or publish the results obtained from the performance of studies pursuant to this MOA, independently or jointly. The publishing party will, however, acknowledge/reference work performed by the other party and notify that party, in advance, of their intent to disclose/publish information resulting from work performed under this MOA.

## **VIII. AMENDMENTS AND MODIFICATIONS**

All modifications to this MOA shall be in writing and shall be executed by the FAA and NASA signatories or their designated representatives, acting within the scope of their authority. Any major change in the work required under this MOA will be outlined, in detail. If the change falls within the scope of the MOA, it must be formalized by written, bilateral agreement between the FAA and NASA. If the change falls outside the scope of the MOA, the MOA must be modified accordingly and coordinated, approved, and signed by FAA and NASA signatories. Any disputes that may



arise under this Agreement will be resolved by the Technical Representatives (see Section V, Technical Representatives) in accordance and compliance with appropriate FAA and NASA policies and procedures.

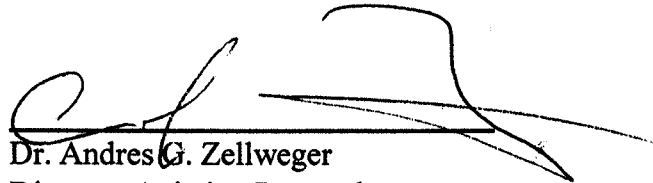
## **IX. AUTHORITY**

This MOA is entered into on behalf of NASA under the authority of the National Aeronautics and Space Act of 1958, as amended, 42 USC 2451 et seq., and FAA as implemented under the Federal Aviation Administration Act of 1996, Public Law 104-264 (enacted October 9, 1996), Section 226 (Contracts), (to be codified at 49 USC 106(l)). Further, this cooperative activity is established under the agreement for cooperation between the FAA and NASA concerning the FAA/NASA Coordinating Committee, signed by the Administrators on January 30, 1990.

By our signatures below, we hereby indicate our agreement as outlined in this MOA between the National Aeronautics and Space Administration and the Department of Transportation, Federal Aviation Administration.

**APPROVAL:**

**Department of Transportation  
Federal Aviation Administration**



Dr. Andres G. Zellweger  
Director, Aviation Research

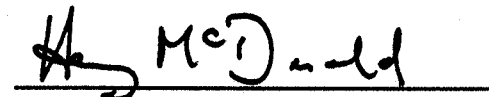
Date: 2/11/97

**National Aeronautics and Space  
Administration**



Dr. Jeremiah F. Creedon  
Director, Langley Research Center

Date: 2/11/97

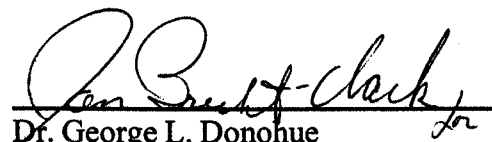


Dr. Henry McDonald  
Director, Ames Research Center

Date: 2/14/97

**CONCURRENCE:**

**Department of Transportation  
Federal Aviation Administration**



Dr. George L. Donohue  
Associate Administrator for  
Research and Acquisitions

Date: 2/21/97

**National Aeronautics and Space  
Administration**



Dr. Robert E. Whitehead  
Associate Administrator for  
Aeronautics

Date: 3/12/97